

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Cancelled)

2. (Currently Amended) A laser oscillation element, comprising:

a first cholesteric liquid crystal layer containing cholesteric liquid crystals;

a second cholesteric liquid crystal layer containing cholesteric liquid crystals facing said first cholesteric liquid crystal layer;

[[and]] a defect layer containing a dye which emits fluorescence upon optical excitation disposed between said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer[[,]];

a first alignment substrate provided on the first cholesteric liquid crystal layer on the opposite side to the defect layer; and

a second alignment substrate provided on the second cholesteric liquid crystal layer provided on the opposite side to the defect layer,

wherein the first and second alignment substrates each comprises an alignment film composed of a material selected from a polyamide, a polyvinyl alcohol or a silane coupling agent;wherein:

the selective reflection wavelength band in said cholesteric liquid crystals and the fluorescence emission band of the fluorescence emitted from said dye overlap with each other in at least a part of the wavelength range;

the helical winding directions of the cholesteric liquid crystals in said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer are identical; and

the transition moments of said dye are parallel to the surfaces of said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer,

wherein-said defect layer is composed of an anisotropic medium, and
said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer are aligned such that the directors of the cholesteric liquid crystals in the surface on the defect layer side of said first cholesteric liquid crystal layer, and the directors of the cholesteric liquid crystals in the surface on the defect layer side of said second cholesteric liquid crystal layer, are parallel to each other.

3. (Currently Amended) A laser oscillation element, comprising:
- a first cholesteric liquid crystal layer containing cholesteric liquid crystals;
 - a second cholesteric liquid crystal layer containing cholesteric liquid crystals facing said first cholesteric liquid crystal layer; and
 - a defect layer composed of an anisotropic medium disposed between said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer[.];
- a first alignment substrate provided on the first cholesteric liquid crystal layer on the opposite side to the defect layer; and
- a second alignment substrate provided on the second cholesteric liquid crystal layer provided on the opposite side to the defect layer.

wherein the first and second alignment substrates each comprises an alignment film composed of a material selected from a polyamide, a polyvinyl alcohol or a silane coupling agent; wherein:

the helical winding directions of the cholesteric liquid crystals in said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer are identical;

a dye which emits fluorescence upon optical excitation is contained in at least one of said first cholesteric liquid crystal layer, said defect layer and said second cholesteric liquid crystal layer; and

the selective reflection wavelength band in said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer, and the fluorescence emission band of the fluorescence emitted from said dye, overlap in at least part of the wavelength range, and

said first cholesteric liquid crystal layer and said second cholesteric liquid crystal layer are aligned such that the directors of the cholesteric liquid crystals in the surface on the defect layer side of said first cholesteric liquid crystal layer, and the directors of the cholesteric liquid crystals in the surface on the defect layer side of said second cholesteric liquid crystal layer, are parallel to each other.

4. (Previously Presented) The laser oscillation element according to claim 2, wherein said defect layer contains liquid crystals.

5. (Original) The laser oscillation element according to claim 4, wherein said liquid crystals are nematic liquid crystals.

6. (Original) The laser oscillation element according to claim 5, wherein the transition moments of said dye and the directors of said nematic liquid crystals are aligned parallel to each other.

7. (Previously Presented) The laser oscillation element according to claim 5, wherein said dye is contained in the same layer as the nematic liquid crystals.

8. (Previously Presented) The laser oscillation element according to claim 2, wherein said cholesteric liquid crystals have a wavelength at an emission peak in an emission band of the fluorescence emitted from said dye in the selective reflection wavelength band.

9. (Previously Presented) The laser oscillation element according to claim 4, wherein said dye is an organic dye.

10. (Cancelled).

11. (Previously Presented) The laser oscillation element according to claim 3, wherein said defect layer contains liquid crystals.

12. (Previously Presented) The laser oscillation element according to claim 11, wherein said liquid crystals are nematic liquid crystals.

13. (Previously Presented) The laser oscillation element according to claim 8, wherein the transition moments of said dye and the directors of said nematic liquid crystals are aligned parallel to each other.

14. (Previously Presented) The laser oscillation element according to claim 9, wherein the transition moments of said dye and the directors of said nematic liquid crystals are aligned parallel to each other.

15. (Previously Presented) The laser oscillation element according to claim 3, wherein said cholesteric liquid crystals have a wavelength at an emission peak in an emission band of the fluorescence emitted from said dye in the selective reflection wavelength band.

16. (Previously Presented) The laser oscillation element according to claim 5, wherein said dye is an organic dye.

17. (Previously Presented) The laser oscillation element according to claim 6, wherein said dye is an organic dye.

18. (Previously Presented) The laser oscillation element according to claim 7, wherein said dye is an organic dye.

19. (Cancelled).